

Figure 5.9 (continued)

Table 4
Level of Education

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
7th grade or less	25	1.5%	25	1.5%
8th grade	59	3.5%	84	5.0%
Some high school	125	7.5%	209	12.5%
Completed high school	610	36.6%	819	49.1%
Some college	383	23.0%	1,202	72.1%
Completed college	258	15.5%	1,460	87.6%
Some graduate school	80	4.8%	1,540	92.4%
Completed graduate school	127	7.6%	1,667	100.0%

Frequency Missing = 205

Table 5
Non-Formal Education (Training)

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
None	774	46.2%	774	46.2%
Some vocational school	98	5.9%	872	52.1%
Completed vocational school	84	5.0%	956	57.1%
Correspondence school	25	1.5%	981	58.6%
Job training seminars	270	16.1%	1,251	74.7%
Extension courses	46	2.7%	1,297	77.4%
Other adult education	103	6.1%	1,400	83.5%
More than one of the above	275	16.4%	1,675	99.9%

Frequency Missing = 197

Table 6
Working Fulltime

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
No householder	641	35.0%	641	35.0%
One householder	642	35.1%	1,283	70.1%
Two householders	502	27.4%	1,785	97.5%
Three householders	43	2.3%	1,828	99.8%
More than three householders	2	0.1%	1,830	99.9%

Frequency Missing = 42

Table 7
Household Size

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
One person	372	20.5%	372	20.5%
Two people	723	39.9%	1,095	60.4%
Three people	278	15.3%	1,373	75.7%
Four people	284	15.7%	1,657	91.4%
Five people	102	5.6%	1,759	97.0%
Six people	40	2.2%	1,799	99.2%
Seven people	8	0.4%	1,807	99.6%
Eight people	6	0.3%	1,813	99.9%

Frequency Missing = 59

The tables in Figure 5.9, based on the OPASTCO Subscriber Survey, provide a statistical snapshot of rural Americans. Of those responding to the survey, 30.4 percent are age 65 and older. The median annual household income is \$25,000 to \$29,999. As for education, 36.6 percent of the respondents have completed high school, and 15.5 percent have completed college.

Rural Residents' Current Service

Although the price for basic telephone service traditionally is lower in rural areas, service penetration also tends to be somewhat lower than in urban areas. Figure 5.10 shows the difference between penetration levels in **Metropolitan Statistical Areas (MSAs)** and non-MSAs. The penetration gap has been narrowing in recent years, but pressure to eliminate support mechanisms threatens to reverse this process.

Figure 5.10

Difference in Telephone Penetration Between MSAs and Non-MSAs

Year*	Percentage Penetration in MSA	Percentage Penetration in Non-MSA	Difference in Penetration	Percentage Penetration in United States
1992	94.5	91.7	2.8	93.9
1991	94.4	91.2	3.2	93.7
1990	94.1	90.8	3.3	93.4
1989	93.9	90.5	3.4	93.1
1988	93.8	89.9	3.9	92.9

Source: Special computer tabulation by Alex Belinfante, Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission.

* This analysis was done on the U.S. Census sample for the March quarter of each year. It is not the total year average.

The tables in Figure 5.11 provide a picture of current telephone service in rural America. About half of the rural residents responding to the OPASTCO Subscriber Survey have **extended area service (EAS)**. Slightly more than 3 percent report that they have party-line service, with age being the most important factor in predicting who has such service. Older residents tend to have more party-lines, while the two youngest groups (those age 18 and under and those ages 19 to 24) report no party lines.

Nearly 65 percent of the rural subscribers report that they have TouchTone service. Both age and income affect who has TouchTone service, with subscription to the service rising as income level increases and declining as age increases.

Slightly less than 25 percent of the respondents subscribe to custom calling features, with call waiting being the most commonly subscribed to feature. Tables 4 and 5 in Figure 5.11 show the subscriber rate by feature and the number of features used by subscribers. Custom calling subscription appears to be more affected by age than by income.

Some respondents indicate that a 911 emergency service system is being installed in their area, and that they have begun paying for it, but that the service is not yet operational. In the comment area on the survey, several subscribers referenced 911 as a service they would like to have.

Figure 5.11

OPASTCO Subscriber Survey Respondents' Current Telephone Service**Table 1**
Extended Area Service (EAS)

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Does not have EAS	921	49.6%	921	49.6%
Has EAS	726	39.1%	1,647	88.7%
Doesn't know	210	11.3%	1,857	100.0%

Frequency Missing = 15

Table 2
Single- vs. Party-Line Service

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Single-line service	1,783	96.5%	1,783	96.5%
Party-line service	64	3.5%	1,847	100.0%

Frequency Missing = 25

Table 3
TouchTone Service

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Does not have TouchTone service	574	31.0%	574	31.0%
Has TouchTone service	1,196	64.6%	1,770	95.6%
Doesn't know	81	4.4%	1,851	100.0%

Frequency Missing = 21

Table 4
Custom Calling Features

Features	Frequency	Percentage
Call waiting	352	19.0%
Speed dialing	112	6.1%
Call forwarding	57	3.1%
Three-way conference calling	33	1.8%
Cancel call waiting	16	0.9%
Distinctive ring/coded ring	14	0.8%

Frequency Missing = 22

(continued)

Figure 5.11 (continued)

Table 5
Number of Custom Calling Features

Features	Frequency	Percentage
None	1,419	76.7%
One	330	17.8%
Two	68	3.7%
Three	19	1.0%
Four	10	0.5%
Five	3	0.2%
Six	*	0.1%

Frequency Missing = 22

Table 6
911 Emergency Service

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Does not have 911 emergency service	728	39.0%	728	39.0%
Has 911 emergency service	1,016	54.4%	1,744	93.4%
Doesn't know	122	6.5%	1,866	99.9%

Frequency Missing = 6

Linking Individuals in Rural Society

As the American economy becomes more and more dependent upon information as a product and that information is increasingly accessible in electronic form, the public telephone network will gain even more importance. Despite many new providers appearing in the market, there is little evidence that rural, sparsely populated areas will reap the benefits of robust competition in the near term. This is because any time a provider must attract a large critical mass of consumers to make a service accessible, revenues from these areas will not cover costs.

For example, although cellular telephone service is growing rapidly with a national overall penetration rate of 10 percent, rural cellular penetration among residential subscribers is 7.7 percent according to the OPASTCO Subscriber Survey data.²⁰ The survey also indicates that cable television penetration in rural areas is approximately 46 percent; however, several respondents indicate that they have no access to cable television. Traditional telephone service still is the only ubiquitous rural service, a condition likely to prevail for some time. (See Table 1 in Figure 5.12).

Not surprisingly, the OPASTCO Subscriber Survey indicates that the telephone is the most crucial of all communications services. As Table 2 in Figure 5.12 indicates, nearly 65 percent of the survey respondents list telephone service as their most important communications service. The

²⁰Rural business subscription to cellular service is much higher at 30 percent, according to the OPASTCO Subscriber Survey data.

Figure 5.12

Communications Media Used by the OPASTCO Subscriber Survey Respondents**Table 1**
Media Subscribed To or Used Regularly

Medium	Percentage of Respondents Using Regularly	Medium	Percentage of Respondents Using Regularly
Daily newspaper	57.3%	Broadcast television	45.3%
Weekly newspaper	48.2%	Telephone service	88.3%
Newsletter	15.1%	Other services (primarily radio/satellite)	4.6%
Paging or beeper service	4.0%	General interest magazines	48.0%
Cellular telephone	7.7%	Special interest magazines	46.7%
Videotape rentals	42.3%	News magazines	18.6%
Electronic mail	2.6%	Overnight delivery service	5.5%
Basic cable television	32.7%	Computer database service	2.8%
Expanded basic cable television	18.0%	Computer bulletin board	1.8%
Premium cable television	6.1%		
Cable television special events	1.8%		

Frequency Missing = 10

Table 2
**Most Important
Communications Service**

Communications Service	Frequency	Percentage
None	1	0.1%
Daily newspaper	180	10.1%
Weekly newspaper	30	1.7%
Newsletter	3	0.2%
Paging or beeper service	8	0.4%
Cellular telephone	9	0.5%
Videotape rentals	3	0.2%
Electronic mail	1	0.1%
Basic cable television	67	3.8%
Expanded basic cable television	29	1.6%
Premium cable television	15	0.8%
Cable television special events	1	0.1%
Broadcast television	136	7.6%
Telephone service	1,156	64.9%
Other services		
(primarily radio/satellite)	16	0.9%
General interest magazines	1	0.1%
Special interest magazines	16	0.9%
News magazines	4	0.2%
Overnight delivery service	2	0.1%
Computer database service	2	0.1%
Computer bulletin board	2	0.1%
More than one service	99	5.6%

Frequency Missing = 91

Table 3
**Most Frequently Used
Communications Service**

Communications Service	Frequency	Percentage
None	1	0.1%
Daily newspaper	148	8.5%
Weekly newspaper	18	1.0%
Newsletter	3	0.2%
Paging or beeper service	4	0.2%
Cellular telephone	3	0.2%
Videotape rentals	15	0.9%
Electronic mail	3	0.2%
Basic cable television	190	10.9%
Expanded cable television	114	6.6%
Premium cable television	36	2.1%
Cable television special events	0	0.0%
Broadcast television	281	16.1%
Telephone service	736	42.3%
Other services		
(primarily radio/satellite)	22	1.3%
General interest magazines	7	0.4%
Special interest magazines	7	0.4%
News magazines	4	0.2%
Overnight delivery service	0	0.0%
Computer database service	0	0.0%
Computer bulletin board	0	0.0%
More than one service	148	8.5%

Frequency Missing = 132

OPASTCO Subscriber Survey Respondents' Use of Their Telephones

Response	Frequency	Percentage
Family member	933	49.9%
Friend	215	11.5%
Relative	170	9.1%
Combination family/friend/relative	321	17.2%
Business person	57	3.0%
Co-worker	11	0.6%
Combination of business relationships	4	0.2%
Fellow association/club member	5	0.3%
Other	16	0.9%
Combination of all types	139	7.4%
Frequency Missing =	1	

Response	Frequency	Percentage
Social contact/keeping in touch	1221	74.6%
Getting/giving information	155	9.5%
Getting something done	92	5.6%
Scheduling	68	4.2%
Other	35	2.1%
Coordinating community activities	20	1.2%
More than one use	16	1.0%
All uses	14	0.9%
Handling a crisis	11	0.7%
None	2	0.1%
Not applicable	2	0.1%

Frequency Missing = 236

OPASTCO Subscriber Survey Respondents' Diversity of Telephone Use

Response	Frequency	Percentage
One use	295	15.8%
Two uses	350	17.7%
Three uses	447	22.1%
Four uses	393	21.1%
Five uses	282	15.1%
Six uses	116	6.2%
Seven uses	15	0.8%
None	22	1.2%
Frequency Missing = 7		

[illegible]

daily newspaper is a distant second at 10.1 percent, while traditional broadcast television is third at 7.6 percent.

The telephone also is the most frequently used service, according to 42.3 percent of respondents. Broadcast television is second (16.2 percent) as a single service category. Combining all cable television categories yields a response of most frequently used for 19.6 percent of respondents. (Basic cable accounts for most of these responses—almost 11 percent.) If all television-related categories are combined, television's use is a close second to telephone service at 35.8 percent.²¹

The importance of the telephone to subscribers is not based on its use to them as individuals, but rather on the shared benefit that they derive from the medium. All levels of social function benefit from the telephone, and that benefit inevitably occurs to both parties of a conversation, whether someone is using the telephone to order a product, talk to a family member, or schedule a doctor's appointment. The next section examines calling patterns and types of telephone use among friends and family and gives some insights into the benefits of the telephone that are shared by urban and rural subscribers.

Linking Individuals to Friends and Family

The most important use of the telephone for the OPASTCO Subscriber Survey respondents is to communicate with family members (see Figure 5.13). Nearly 90 percent name family members, friends, and relatives as the parties most frequently called from their premises. Survey respondents also cited social contact as the most frequent purpose associated with calling. Clearly the role of the telephone in maintaining family ties is very important. Increasingly, in the public policy arena, the breakdown of the family is cited as a contributing factor to other social problems, such as increased crime rates and lowered educational achievement. Maintaining family ties can help offset other social problems, but reducing access to telephone service clearly would reduce access to family ties.

Another way of looking at the telephone's role in rural life is the diversity of use among subscribers, as shown in Figure 5.14. Table 1 shows the number of different purposes for which OPASTCO Subscriber Survey respondents used their telephones in the month prior to the survey, while Table 2 evaluates those numbers based on lifestyle category. Both diversity and amount of use rise with household size and the presence of children.

Families with children, particularly teenagers, show the most usage diversity and the highest number of local calls placed among lifestyle categories. Tables 1 and 2 in Figure 5.15 show that seniors make and receive a high number of local calls daily although research on seniors generally shows they have lower usage. This indicates that the telephone may be more important for seniors living in rural areas than for seniors in general. Perhaps they rely more on the telephone to stay in contact and minimize physical travel because of their relatively greater isolation. Tables 3 and 4 in Figure 5.15, which

²¹ Respondents clearly do not measure frequency of use according to time spent using the service; the average American spends more than seven hours per day watching television, while few people spend seven hours on the telephone. Frequency of use, as reported by respondents, appears to be a function of how many times a person chooses to use a medium, rather than the time spent with the medium.

Figure 5.15

Calls Made and Received Daily by the OPASTCO Subscriber Survey Respondents**Table 1
Number of Local Calls Made per Day by Lifestyle Category**

Lifestyle Category	Average	Median	Range ¹
Families with children age 10 and under	4.2	3	0 - 15
Families with teenagers	5.2	4	0 - 15
Starting-out singles	3.8	2	1 - 15
Young couples, no children	3.7	3	0 - 15
Mature singles	2.8	2	0 - 15
Empty nesters	3.9	2	0 - 19
Seniors age 65 and over	4.3	4	0 - 19

¹Approximately 7.6 percent of the respondents report 20 or more calls per day. These responses were excluded from this analysis because it is not possible to know, on a continuous basis, how many calls actually are made, only that it is at least 20.

**Table 2
Number of Local Calls Received per Day by Lifestyle Category**

Lifestyle Category	Average	Median	Range ²
Families with children age 10 and under	4.5	3	0 - 17
Families with teenagers	5.8	5	0 - 19
Starting-out singles	3.2	2	1 - 16
Young couples, no children	3.7	3	0 - 19
Mature singles	3.3	2	0 - 15
Empty nesters	3.6	2	0 - 18
Seniors age 65 and over	4.1	4	0 - 18

²Approximately 6.5 percent of the respondents report 20 or more calls per day. These responses were excluded from this analysis because it is not possible to know, on a continuous basis, how many calls actually are received, only that it is at least 20.

**Table 3
Number of Long Distance Calls Made per Day by Lifestyle Category**

Lifestyle Category	Average	Median	Range ³
Families with children age 10 and under	9.6	10	0 - 18
Families with teenagers	9.0	10	0 - 18
Starting-out singles	8.1	9	0 - 15
Young couples, no children	8.7	10	0 - 18
Mature singles	5.0	7	0 - 18
Empty nesters	8.4	10	0 - 18
Seniors age 65 and over	7.3	6	0 - 19

³The range, average, and median reported are based only on the respondents who make less than 19 calls per month. The survey did not differentiate answers for those making more than 19 calls per month. Because the local calling area is limited, this percentage is fairly substantial in rural areas in that it includes calls to nearby towns that are toll calls (28.9 percent in the survey).

**Table 4
Number of Long Distance Calls Received per Day by Lifestyle Category**

Lifestyle Category	Average	Median	Range ⁴
Families with children age 10 and under	8.1	8	0 - 18
Families with teenagers	8.2	8	0 - 18
Starting-out singles	7.7	9	0 - 17
Young couples, no children	8.5	9	0 - 18
Mature singles	6.0	5	0 - 18
Empty nesters	7.7	8	0 - 18
Seniors age 65 and over	6.9	6	0 - 19

⁴The range, average, and median reported are based only on the respondents who receive less than 19 calls per month. The survey did not differentiate answers for those receiving more than 19 calls per month. Because the local calling area is limited, this percentage is fairly substantial in rural areas in that it includes calls to nearby towns that are toll calls (18.6 percent in the survey).

show long distance calls made and received, present a more traditional pattern of senior use, where they place and receive fewer calls. Access to telephone service generally is very high among seniors as compared with the rest of the population. It appears to be even more important to seniors in rural areas.

The propensity of seniors to make more local calls than long distance calls should be considered by policy-makers seeking to shift costs to the local jurisdiction. Such a shift would have an adverse impact on seniors: more of their calls are local, and they represent 56 percent of the survey respondents who have an income level below \$10,000.

Also, the OPASTCO Subscriber Survey shows that rural residents in general make more long distance calls than they receive. This is an important finding and suggests that further analysis of these patterns is necessary.

Linking Individuals to Their Communities

Little data has been available describing the important roles of the telephone in linking rural residents to their community. The OPASTCO Subscriber Survey was designed to fill in this information gap by showing the importance of telephone service in everyday rural life.

An individual telephone subscription becomes part of community service when subscribers share access with others. FCC statistics²² indicate that individuals with no telephone in their household sometimes perceive they have local service available as long as they can rely on someone else's telephone.

To measure this "sharing" characteristic, the OPASTCO Subscriber Survey asked respondents if they know anyone without a telephone. If respondents answered "Yes," they were asked whether and how often they take messages for their "telephoneless" acquaintance. According to Tables 1 and 2 in Figure 5.16, almost 38 percent of the respondents report knowing someone who does not have a telephone, and almost 13 percent report taking messages for such a person.

This data indicates that a significant number of individuals in rural America still do not have telephone service. And again, while the gap between penetration levels in MSAs and non-MSAs shown in Figure 5.10 has been narrowing in recent years, pressure to eliminate support mechanisms threatens to reverse this process.

The frequency with which people take messages for others varies. Clearly, the benefit of doing so does not accrue to the household actually subscribing to telephone service but rather to an outside individual. Hence, the common argument that the cost causer should be the one who pays for the costs of providing service does not account for the fact that telephone access sometimes is shared with others. The subscriber is not the cost causer here. In fact, the subscriber incurs costs on behalf of another. It is difficult to quantify the perceived cost to the telephone subscriber without knowing how the message-taker values his or her time. Assuming that a least five minutes is involved in recording and relaying a message, using median household income as the valuation of cost results in an average

²²Alex Belinfante, "Telephone Subscribership In the United States," Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, 1993.

Figure 5.16

Telephone Message-Taking by the OPASTCO Subscriber Survey Respondents

Table 1
Knows Someone Without a Telephone

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Doesn't know anyone without a telephone	1,140	62.2%	1,140	62.2%
Knows someone without a telephone	693	37.8%	1,833	100.0%

Frequency Missing = 39

Table 2
Takes Messages for Someone Without a Telephone

Response	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
No	1,204	87.1%	1,204	87.1%
Yes	179	12.9%	1,383	100.0%

Frequency Missing = 489

Table 3
Number of Messages Taken per Month

Response	Frequency	Percentage
One per month	51	28.5%
Two per month	21	11.7%
Three per month	10	5.6%
Four per month	17	9.5%
Five per month	1	0.6%
Six per month	2	2.2%
Eight per month	2	2.2%
Twelve per month	2	3.9%
Fourteen per month	2	1.7%
Fifteen per month	2	1.1%
Eighteen per month	1	0.6%
Twenty per month	1	0.6%
Thirty per month	2	1.7%
Forty-eight per month	1	0.6%
Sixty per month	2	1.1%
One hundred and twenty per month	1	0.6%
Doesn't know how often	6	3.3%
Occasionally	8	4.5%
Often	36	20.1%
Total	179	

Table 4
Those Taking Messages by Dwelling Type

Type of Dwelling	Percentage
Single-family house	11.6%
Townhouse/duplex	15.8%
Apartment/condominium	18.2%
Other (primarily trailer homes)	22.4%
Extended-family house	18.2%
Frequency Missing = 623	

cost of about \$1 to the subscriber for each message taken. The message-taking subscribers therefore are supporting households without telephone service in two ways: through the cost of their telephone service subscription and through the cost of their time.

A significant relationship exists between a resident's type of dwelling and the likelihood that the person takes telephone messages for others. Generally, people who checked "Other" in the survey's dwelling category take the most messages. A predominance of these people live in trailer homes. Apartments and extended-family houses also exhibit a higher incidence of message-takers. Table 4 in Figure 5.16 shows the breakdown of message-takers' dwelling types. Further, it is important to note that no relationship exists between income and the propensity to take telephone messages for someone without a telephone.

The telephone also links rural residents by helping people coordinate community activities. Many functions that are necessary to maintain rural communities are carried out through the volunteer activities of residents because the communities' revenue base is too small to support these func-

Figure 5.17

OPASTCO Subscriber Survey Respondents' Use of Their Telephones

Table 1
Type of Telephone Use in the Previous Month

Type of Use	Frequency	Percentage
Social contact/keeping in touch	749	93.8%
Scheduling	884	47.4%
Coordinating community activities	440	23.6%
Handling a crisis	439	23.5%
Getting something done	1,049	56.2%
Getting/giving information	1,296	69.5%
Other	116	6.2%
Frequency Missing = 7		

Table 2
Type of Telephone Use Deemed Most Important

Type of Use	Frequency	Percentage
Social contact/keeping in touch	798	47.2%
Handling a crisis	327	19.3%
Getting/giving information	176	10.4%
Getting something done	168	9.9%
Scheduling	103	6.1%
Other	62	3.7%
All are important	25	1.5%
More than one use	18	1.1%
Coordinating community activities	10	0.6%
Doesn't know	2	0.1%
None	2	0.1%
Frequency Missing = 181		

tions through formal and/or professional institutions. Some community activities occur completely on an informal level because they are "occasional" in nature. The response to crisis situations, such as the 1993 floods in the Midwest where residents compiled "teams" to sandbag the river banks, is an example of this type of activity. Organizing a welcome home parade for soldiers returning from the Gulf War is another example of an occasional activity. Other activities are more routine and are discussed later under community organization business. The telephone, as an efficient tool of coordination, plays an important role in both types of community maintenance. Table 1 in Figure 5.17 shows the types of telephone use reported by respondents during the month preceding the survey. Coordinating community activities is mentioned by 23.6 percent of the respondents.

The fact that coordinating community activities ranks last in order of importance on Table 2 in Figure 5.17 suggests that this use of the telephone would be very vulnerable to reduction if local service rates were to rise. Subscribers would likely drop the least important use first to save money.

Figure 5.18

OPASTCO Subscriber Survey Respondents' Use of Their Telephones in the Community

Table 1
Participation in Community Organizations

Type of Community Group	Frequency	Percentage
Local sports league	358	19.6%
Neighborhood watch	83	4.5%
PTA or other school organization	280	15.3%
Volunteer firefighters/rescue squad	153	8.4%
Religious group or church	917	50.2%
Service organizations	290	15.9%
Political organizations	18	6.5%
Local chapter of a professional or labor association	153	8.4%
Other volunteer service group or community association	261	14.3%
None of the above	509	27.8%

Frequency Missing = 44

Table 2
Use of Home Telephone for Community Organization Business

Response	Frequency	Percentage
No—Not used for community business	734	48.2%
Yes—Used for community business	788	51.8%
Used, but no indication of how often	14	0.9%
Used less than once a month	168	11.0%
Used once a month	194	12.7%
Used more than once a month	412	27.1%

Frequency Missing = 350

Because one response to dramatic local rate increases by regulators is implementation of a local measured service budget rate, how subscribers use the telephone is a very important consideration.

There also is a clear indication, as outlined earlier in this chapter, that if local service rates go up, subscribers would lower their long distance usage to maintain an affordable total on their monthly telephone bills. Survey respondents indicate that their community of interest often extends beyond the geographic limit of their free calling area. Approximately 25 percent of the survey respondents say that their local calling area is not large enough to cover the calls they consider part of their everyday life. Once again, however, telephone calls to coordinate community activities would be among the first to be discontinued by subscribers seeking to save money. The consequence of such an outcome is increased expenditures for the infrastructure and institutions necessary to maintain the community, as activities previously handled on an informal and volunteer basis by community residents must be formalized.

Another of the telephone's contributions to rural society is residents' use of their home telephone to conduct community organization business. This use is cited by almost 52 percent of the survey respondents. The tables in Figure 5.18 show respondents' involvement in community groups and how often they use their telephone on behalf of a community organization. Community organizations, such as churches and service organizations, do everything from feed the needy to maintain community parks. Increased telephone rates could jeopardize volunteer activities by limiting or eliminating the home telephone service critical to the existence and functioning of volunteer organizations. Any policy considerations related to local service rate increases must take into account the interaction and shared benefit of the telephone between the home and the community.

As indicated by the results presented in this chapter, evaluating the effect of rate increases caused by eliminating cost support mechanisms is far more complex than simply looking at whether local and long distance rates will rise and by how much. Policy-makers must consider how rural residents will react to rate increases, how the difficult disconnection and spending decisions they would be forced to make would affect the quality of their lives, and what the cost would be in the larger social frame given the significant positive social benefits that access to the telephone provides. Also, keeping access to telephone service affordable and universal is the only way to ensure that all consumers have access to the information superhighway, an increasingly vital resource for economic and political participation.

While anecdotal evidence abounds regarding the telephone's positive social externality, little data previously was available to support this theory. The OPASTCO Subscriber Survey results can now supply policy-makers with such data. When revisions to cost support mechanisms and rate averaging issues are considered, evidence is now available so that the social benefit of telephone service can be a key component of the discussion.